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AUTHOR Salzer, Mark S.; Nixon, Carol; Schut, L. James A.; Karver, Marc S.; Bickman, Leonard

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ABSTRACT

This paper critiques current models for evaluation of mental health services provided to children and adolescents with emotional disturbances and offers an alternative model. The most popular model, Donabedian's tripartite model, is described. This model separately evaluates three domains: (1) structure (characteristics of the care providers, their tools and resources, and the physical/organizational setting); (2) process (both interpersonal and technical aspects of the treatment process); and (3) outcome (change in the patient's symptoms and functioning). The paper then notes three approaches used to assess these domains: the use of standards and guidelines, peer review, and outcomes monitoring. Problems with these approaches are identified including: lack of validity data on the importance of structure and process indicators, the poor reliability of peer reviews, and difficulty in relating outcomes directly to services. The paper proposes a model in which quality is viewed strictly as the relationship between quality indicators (i.e., structure and process variables) and quality validators (i.e., outcomes). This approach is in contrast to viewing quality as existing separately within each component. Benefits of this approach include better services, use of quality indicators with known validity, and better program planning. (Contains 19 references.) (DB)

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Introduction

Consumers, providers, and policymakers all have called for the monitoring of quality in order to ensure that lower costs do not mean low-quality care. The assessment of quality is also a significant element of the continuous quality improvement movement, a movement that is crucial for improving mental health services.

Three circumstances inhibit meaningful monitoring of quality of care in children's mental health. First, the indicators compiled to date do not extensively cover all quality domains. Second, research on quality of care in children's health services is conspicuously lacking (McGlynn, Halfon, & Leibowitz, 1995). Third, the concept of quality of care is underdeveloped to the extent that current approaches to monitoring quality may fail to assess the "goodness" of delivered services. This summary focuses on the last concern.

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The Holy Trinity of Structure, Process, and Outcome

Most approaches to evaluating quality are based to some extent on Donabedian's tripartite model of quality. This model addresses three domains: structure, process, and outcome (Donabedian, 1980). Structure refers to "the relatively stable characteristics of the providers of care, of the tools and resources they have at their disposal, and of the physical and organizational settings in which they work" (Donabedian, 1980, p. 81). Five structural categories are thought to be important in assessing the quality of service structure: (a) Access; (b) Institutional Characteristics; (c) Provider Characteristics; (d) Community Characteristics; and (e) Client Characteristics.

Process focuses primarily on treatment process, including interpersonal process factors and technical skill in the delivery of services. Interpersonal process refers to the therapeutic relationship and rapport, communication, information dissemination, and shared decision-making that occur as part of treatment. Technical skill encompasses knowledge of state-of-the-art intervention techniques, the ability to assess which intervention provides the best match for the client's problems or diagnosis, and the skill to effectively deliver the best matching intervention.

While Donabedian and other quality-of-care theorists focus on technical and interpersonal factors in understanding process, additional quality process categories should also be considered. Stages-of-treatment-process indicators concern the quality of intake and assessment, treatment planning, service utilization (e.g., # of sessions/service units, length of treatment, and service patterns), and appropriate termination. Service process can also refer to barriers to treatment, timeliness of treatment, accountability to consumers, consumer advocacy, and protection of client rights.

The last component of quality is outcome. Donabedian (1980) defined outcome as "a change in the patient's current and future health status (symptoms and functioning) that can be attributed to antecedent health care" (p. 82). Donabedian also included patient attitudes about treatment, such as patient satisfaction, health-related knowledge, and behavioral change in areas that contribute to health problems. Protection of child and family rights and safety can also be added as another important outcome category. This would include the maintenance of confidentiality, the utilization of least restrictive services, and the right to receive services known to be effective.

Approach to MonitoringQuality of Care

One basic concept appears to underlie all approaches to monitoring quality of care: that quality can be examined by assessing any one of its three components. This concept is

assessing any one of its three components. This concept is consistent with Donabedian (1980), who considered the evaluation of structure, process, or outcome as all providing a similar picture of quality of care. Three approaches have been taken to assess quality of care: the use of standards and guidelines, peer review, and outcomes monitoring.

The evaluation of structure and process indicators has been based on standards, practice guidelines, and report cards developed through literature reviews, general consensus, and expert panels. A growing number of organizations and agencies have developed or are in the process of developing standards, guidelines, and report cards: JCAHO, NCQA, AHCPR, CHAMPUS, SAIC, CMHS, AMBHA, and NAMI.

Peer review is a second approach used to assess quality of care process, and more specifically, the assessment of appropriateness of care. In a review of the literature, Lee Sechrest noted that peer review of mental health care process is common (Sechrest, 1987). For example, standardized peer review procedures have been used to assess appropriateness of psychiatric hospitalization (Strumwasser et al., 1991) and quality of outpatient services (e.g., Daniels, Kramer, & Mahesh, 1995; Hargrave & Hiatt, 1995). Moreover, researchers affiliated with the RAND Corporation have used a "tracer methodology" involving the clinical review of medical records to assess quality of care (Wells et al., 1993).

Finally, outcomes monitoring has grown in popularity over the past few years as a way to assess quality (Guadagnoli & McNeil, 1994). This method assumes that quality care has been delivered if, for example, clients are found to have decreased symptoms and/or increased functioning after treatment, or clients report they are satisfied with treatment.

Problems with Current Approaches to Monitoring Quality of Care

Three glaring problems are evident with these approaches to assessing quality of care. First, the validity of structure and process indicators remains in question, because the extent to which these indicators are linked to outcome is unknown. The Institute of Medicine's (IOM; 1991) definition of quality care referred to "the degree to which services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge" (p.1). Only those quality indicators for which links among structure, process, and outcome exist can be referred to as valid (AHCPR, 1995; Wells & Brook, 1989).

Unfortunately, structure and process indicators are mostly based on expert judgment, which may reflect what we call aesthetic quality and may not be associated with improved outcomes. Despite their intuitive attractiveness, these indicators may have no functional use. For example, the setting of a program, such as a spacious and pleasant physical environment, might not be tied to a clinical

physical environment, might not be tied to a clinical outcome as one might theorize. Credentials and provider experience might be another example of aesthetic quality. Neither of these have been clearly linked to better clinical outcomes (Berman & Norton, 1985; Durlak, 1979; Stein & Lambert, 1984; Weisz, Weiss, Alicke, & Klotz, 1987). Some promising links between service processes and clinical outcome have been found for outpatient psychotherapy. However, most of this work resulted from laboratory research. Little research has been conducted in community-based settings. It is our concern that the lack of valid indicators may result in meaningless quality assurance and continuous quality improvement efforts.

A second problem with the current assessment of quality concerns peer reviews. Peer review approaches to assessing quality have been criticized for being unreliable. For example, studies have found low inter-rater reliability for peer reviews of the quality of outpatient psychotherapy (Cohen & Nelson, 1982; Dall & Clairborn, 1982). Based on his review of the research, Sechrest (1987) concluded that peer review is of limited use for assessing quality. This is due to the fact that peer review is based on intuition and theoretical biases that may result in erroneous conclusions. The unreliability of panel reviews is evident in studies that examine factors impacting the evaluation of appropriateness. Research has shown, for example, that panel composition (Fraser, Pilpel, Kosecoff, & Brook, 1994) and knowledge of clinical outcome before judgments of appropriateness (Caplan, Posner, & Cheney, 1991) have been found to influence peer review ratings of appropriateness.

A third problem with current quality assessment approaches is that outcome monitoring alone does not provide any information about the quality of care that supposedly led to those outcomes. Interpreting outcomes should be done with great caution, because outcomes may have occurred as a result of many influences other than the services provided. Threats to internal validity may include history and maturation, involvement in nonprofessional programs, or natural recovery processes. Whereas Donabedian (1980) recognized the need to examine outcomes that can be attributed to antecedent health care, mental health services researchers often do not attempt to distinguish between services-related outcomes and non-services-related changes.

Quality as Relationship Between Structure, Process, and Outcome

In order to refocus our attention on the meaningful assessment of quality, effort needs to be made to study the validity of quality indicators. In order to further this research, we propose a model whereby quality is viewed strictly as the relationship between quality indicators (i.e., structure and process variables) and quality validators (i.e., outcomes: see Figure 1). This is in contrast to viewing quality as existing separately within each component. Given

quality as existing separately within each component. Given this conceptualization, the quality of a specific structure or process variable is determined by the extent to which it is related to some outcome. Given this understanding of quality, quality of care research would examine the links between quality indicators and validators. For example, coordination of services, a structural variable, may be found to be significantly associated with decreased symptoms and increased functioning. Coordination of services would then be viewed as a valid quality indicator of decreased symptoms and increased functioning. Interpersonal process between the clinician and child/family may be found to be significantly associated with satisfaction, but not the other outcome domains. Therefore, interpersonal process would be viewed as a quality indicator of satisfaction. Completeness of paperwork, another process indicator, may be found to be unrelated to any indicator of outcome and would therefore not be considered a valid quality indicator of clinical outcome.

Advantages of Adopting this Conceptualization of Quality

Adoption of this conceptual framework of quality will benefit the field in a number of ways. First, and most important, measuring valid quality indicators and making changes in response to this data (e.g., through continuous quality improvement efforts) will mean better services for children and families. Second, rather than making broad statements about the quality of a particular service or program, providers and evaluators will be able to explicitly state what outcomes are associated with specific structural or process features. For example, a particular service or program will be able to say that they have short waiting periods that have been shown to be associated with high satisfaction, offer services according to practice guidelines that have been found to be associated with better clinical outcomes, and follow established procedures to protect client rights to confidentiality. Third, distinguishing between outcomes associated with the various indicators will assist policymakers and administrators in making more informed decisions about the utility of certain program features over others. For example, improvement efforts aimed at altering process indicators associated with decreased symptoms and increased functioning might be encouraged over those indicators associated with higher satisfaction.

In conclusion, current quality assurance and continuous quality improvement efforts are limited in their impact to the extent that the quality indicators used are valid. The validity of quality indicators is crucial if we are to meaningfully examine quality of care.

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Authors

Mark S. Salzer, Ph.D.
Research Associate

Carol Nixon, M.A.
Graduate Student

L. James A. Schut, B.A.
Graduate Student

Marc S. Karver, M.A.
Graduate Student

Leonard Bickman, Ph.D.
Professor

Vanderbilt University
1207 18th Avenue South
Nashville, TN. 37212
Voice: 615/343-1668
Fax: 615-322-7049

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